CONSERVATION Showcase

Bunchgrass Demo Launched

by Danny Goodson, agronomist

Felix Nez from the NRCS Dilkon, Arizona Field Office had come across articles on the Los Lunas Plant Materials Center when reasearching ideas to address wind erosion problems, and needed to help dry cropland farmers located on the Navajo nation in Arizona. So it was natural to call the PMC for assistance. His cooperators were producing agronomic crops such as Indian corn using only natural rainfall. Felix was very concerned because much of the farmland area consists mostly of light textured soils and the cropland was experiencing a serious soil erosion problem during high wind events.

Giant sacaton is a native warm season bunchgrass that can reach heights in excess of seven feet and more than four feet wide. The PMC has been evaluating giant sacaton since 1999, by installing windstrip plantings to help protect areas from wind erosion. These plantings have been using small sacaton transplants placed in rows along cropland, farmsteads, and roadways to reduce the effects of wind erosion. The plantings are being drip irrigated and tried in several different types of environments in the PMC service area. The area near The Gap is in the PMC service area and was seen as a unique opportunity to continue evaluating giant sacaton in different climatic zones.

Discussions of a possible windstrip project were worked out by Felix and the PMC and a request was made from the Little Colorado River Soil and Water Conservation District for 200 giant sacaton seedlings for delivery in August. The project would consist of a windstrip planted on nonirrigated cropland near the small community of The Gap, Arizona. The farmland selected has light textured soils and has serious soil erosion during windy periods. The farm is experiencing soil loss and crop damage during these wind events, which is causing a reduction in production from the farmland. This planting will be unique in that the giant sacaton plants will not be established with a drip irrigation system. The transplants will be hand watered by the cooperators during the first couple of

months of establishment after planting. After establishment the giant sacaton will have to exist only on natural rainfall. Not only will this allow the sacaton to be evaluated in this location, but it will measure the effectiveness of a sacaton windstrip planting receiving no supplemental moisture.

On August 22, 2006, 200 giant sacaton transplants were delivered by the PMC to the Jesse Willie farm near The Gap, Arizona. The transplants were planted in a one row windstrip adjacent to one of Willie's fields. The Dilkon Field Office, Gap Sub Office, PMC, cooperator, family members, and community participated in the planting. The transplants were hand watered afterward and will continue to receive watering until the end of this growing season. The sacaton will not receive supplemental water after this year. The LLPMC will be evaluating the planting in 2007 for growth and survival.

Felix and Thomas Tso of The Gap Sub Office have started to contact local farmers in the area to visit the planting site and hope to start enlisting more farms for possible windstrip plantings in the future. The planting on the Jesse Willie farm was installed using funds secured from the Environmental Quality Incentive Program and farmers in the area are being encouraged to use the program to complete any conservation practices, such as windstrips, which can solve resource problems.